

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave. St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000062**Date Inspected:** 18-Jan-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Huang Wei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Bid 52, 55 Tower and Girder**Summary of Items Observed:**

Office of Structural Materials Quality Assurance Inspector (QA), Mark Wright was present as requested to observe quality control functions related to procedure qualification record (PQR) testing at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

The Caltrans QA Inspector went to another ZPMC plant on the island to random observe welder qualifications in process. Upon arrival at the testing lab, the Caltrans QA observed that the qualification tests were being administered by a third party Quality Control Company (Moody International). The QA observed many violations of the code for welder qualifications. The QA observe welding that was out of parameters of the Welding Procedure Specification (WPS) available to the welders. The QA observed Submerged Arc Welding (SAW) test underway. There was not a magnet inside the flux hopper and the volts were outside the WPS.

The QA observed the onsite Certified Welding Inspector (CWI) trying to check the amperage and volts of the welder taking the test. The CWI could not use the amprobe without the ZPMC QA helping him to operate the device.

The QA has some concerns about what was observed on this date. The weld test specimens observed at the lab had wide weave pass weld caps over an inch wide and showed signs of under fill.

The QA inspector expressed concerns with the Prime Contractor onsite representative, Mr. Nate Lindell. He stated that he would address these concerns.

**Summary of Conversations:**

See Task Leader journal for this date.

**Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Wright,Mark	Quality Assurance Inspector
<b>Reviewed By:</b>	McClary,David	QA Reviewer

---